



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------------|------------------|
| 10/815,442 | 04/01/2004 | Tadashi Takano | 3082.EEM | 7775 |
| 7590 | 01/24/2006 | | | |
| JANE E. GENNARO National Starch and Chemical 10 Finderne Avenue Bridgewater, NJ 08807 | | | EXAMINER MULLIS, JEFFREY C | |
| | | | ART UNIT 1711 | PAPER NUMBER |

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|------------------------|---------------------|
| | 10/815,442 | TAKANO, TADASHI |
| Examiner | Art Unit | |
| Jeffrey C. Mullis | 1711 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10 January 2006.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,2 and 6-8 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1,2 and 6-8 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. ____ .
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ . 5) Notice of Informal Patent Application (PTO-152)
6) Other: ____ .

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Repeka (US 5,747,615).

Repeka discloses a process for preparation of an adhesive resin containing a liquid reactive monomer as well a "reactive comonomer". See claim 1 in this re. Note that claim 2 discloses that the comonomer is in particulate form. Note Example 2 for production of a bismaleimide composition in which the bismaleimide is dispersed in particulate form and that microscopic examination shows that the particles still exist after dispersion. Note Example 4 where a cyanate resin is used with the bismaleimide in applicants ratio of bismaleimide:liquid resin (albeit not with applicants specific bismaleimide species). Note however that applicants specific bismaleimides may be used as the bismaleimide component at column 3, lines 31-45.

There are no specific examples having all of applicants features. However choice of such by selecting from the disclosures of the patent would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of adequate results , absent any showing of surprising or unexpected results.

Applicant's arguments filed 11-10-05 have been fully considered but they are not persuasive. Applicants range of ratios appear to be contradictory to 3-30% of paragraph

45 of the published application, i.e. 3-30 % bismaleimide excluding filler. Boyd was withdrawn since applicants species are not suggested by Boyd. Repeka has been reinstated since "ambient" (a limitation not present in the speciation as filed) has been deleted. At present applicants ratio of bismaleimide/liquid monomer appear to be suggested by Repeka. It is suggested that if applicants wish to overcome Repeka by limiting the claimed concentration range of bismaleimide that they amend the claims to recite a range of bismaleimide concentration excluding filler not suggested by Repeka. Applicants may present a range narrower than 3-30 wt % excluding filler by relying on their examples as filed if necessary and point out how such an amendment overcomes Repeka. It appears that concentration of "about" 30 % overlap with Repeka's Example 4 although 30 % would not overlap with Repeka's Example 4. Applicants should confirm that any concentration presented in an amendment does not overlap with Repeka's.

Any inquiry concerning this communication should be directed to Jeffrey C. Mullis at telephone number 571 272 1075.

Jeffrey C. Mullis
J Mullis
Art Unit 1711

JCM

1-20-06

Jeffrey Mullis
Primary Examiner
Art Unit 1711

